



Two new species of the rare orb weaving spider genus *Deione* (Araneae: Araneidae) from China

XIAO-QI MI¹, XIAN-JIN PENG^{2,*} & CHANG-MIN YIN³

^{1,2,3}College of Life Sciences, Hunan Normal University, Changsha, Hunan Province, 410081, P. R. China

¹mixiaoqi1018@126.com, ²xjpeng@126.com, ³yincm@126.com

*(corresponding author)

Abstract

The orb-weaving spider genus *Deione* is diagnosed by having two pairs of vertically arranged humps posteriorly on the abdomen and by the enlarged tibia II of males. Two new species of this genus from Yunnan Province in China, *Deione ovata* n. sp. and *Deione renaria* n. sp. are described here.

Key words: taxonomy, orb-weaver spider, new species, *Deione*, China

Introduction

The araneid spider genus *Deione* Thorell, 1898, with its type species *Deione thoracica* Thorell, 1898, was described but not illustrated by Thorell (1898) based on a single female from Myanmar. Frances and John Murphy (2000) published an illustration of the female habitus of the type species. The type species and *Deione lingulata* Han, Zhu & Levi, 2009 from Hainan Province were reported recently (Han, Zhu & Levi 2009). Up to now, a total of two species of the genus were recorded in China (Platnick 2010).

While examining the specimens collected in the Gaoligong Mountains (Yunnan Province, southwest China) by the Sino-American Expeditions of 1998–2008, two new species of the genus *Deione* were found and are described in this paper. The type specimens are deposited in College of Life Sciences, Hunan Normal University (P. R. China) and some additional specimens will be deposited in the California Academy of Sciences, San Francisco (USA).

Material and methods

Specimens were kept in 75% ethanol. Epigyna were cleared in lactic acid for examination and stored in microvials with the specimen. We used an Olympus SZX16 stereo microscope for specimen examination. Digital photographs were taken using a Nikon DS-Fi1 digital camera and the distribution map was generated using GIS ArcView software (ESRI 2009). Leg measurements are given as: total length (femur, patella + tibia, metatarsus, tarsus). All measurements are given in millimeters (mm).

Abbreviations

ALE, anterior lateral eyes; AME, anterior median eyes; C, conductor; CAS, California Academy of Sciences; E, embolus; KIB, Kunming Institute of Botany; China Academy of Sciences; HNU, Hunan Normal University; MA, median apophysis; MCZ, Museum of Comparative Zoology; Harvard University; MOA, median ocular area; PLE, posterior lateral eyes; PME, posterior median eyes; TA, terminal apophysis.